

What is claimed is:

Sub 1
1. A hybrid construction machine constructed to drive electric motors (6, 7, 13, 15, 23, 25) by means of power of a power generator (11) to be driven by an engine (10), power of an auxiliary battery (42) and power of a main battery (12) to be charged with the power of the power generator (11), comprising:

a switch (43) for switching to drive the electric motors (6, 7, 13, 15, 23, 25) by means of normal power of at least one of the power generator (11) and the main battery (12) in a normal operation state and to drive the electric motors (6, 7, 13, 15, 23, 25) by means of auxiliary power of the auxiliary battery (42) in an emergent operation state that the electric motors (6, 7, 13, 15, 23, 25) can not be driven by means of the normal power.

2. The hybrid construction machine according to claim 1, further, comprising an actuator-selecting switch (54) for selecting at least one of the electric motors (6, 7, 13, 15, 23, 25) to be driven by means of the auxiliary power in the emergent operation state.

3. The hybrid construction machine according to claim 1 or 2, wherein the hybrid construction machine is a hybrid excavator.

4. A control apparatus of a hybrid construction machine for executing works by charging a main battery (12) with power of a power generator (11) to be driven by an engine (10) and driving electric motors (6, 7, 13, 15, 23, 25) by means of power discharged from at least the main battery (12), comprising:

a generator output control body (51) for varying power output from the power generator (11) in accordance with content of work.

5. The control apparatus of a hybrid construction machine according to claim 4, further comprising:

a manipulating lever (45) to be manipulated by an operator; and
a work determination body (46) for determining the content of work on the basis of manipulating signal from the manipulating lever (45) and outputting the content of work to the generator output control body (51).

6. The control apparatus of a hybrid construction machine according to claim 4, further comprising:

a work mode switch (49) with which the content of work can be appointed by an operator; and

a switch detection body (50) for detecting the content of work appointed with the work mode switch (49) and outputting the content of work to the generator output control body (51).

7. A control apparatus of a hybrid construction machine for executing works by charging a main battery (12) with power of a power generator (11) to be driven by an engine (10) and driving electric motors (6, 7, 13, 15, 23, 25) by means of power of at least one of the power generator (11) and the main battery (12), comprising:

a work speed regulation body (47) for regulating work speed in accordance with content of work when power of the power generator (11) is a predetermined value or less.

8. The control apparatus of a hybrid construction machine according to claim 7, further comprising:

a manipulating lever (45) to be manipulated by an operator; and

a work determination body (46) for determining the content of work on the basis of manipulating signal from the manipulating lever (45) and outputting the content of work to the work speed regulation body (47).

9. The control apparatus of a hybrid construction machine according to claim 7, further comprising:

a work mode switch (49) with which the content of work can be appointed by an operator; and

a switch detection body (50) for detecting the content of work appointed with the work mode switch (49) and outputting the content of work to the work speed regulation body (47).

10. The control apparatus of a hybrid construction machine according to any of claims 4 to 9, wherein the hybrid construction machine is a hybrid excavator.